



## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(TM) Scotch-Weld(TM) High Temperature Instant Adhesive HT700 (formerly sold as Rite-Lok™ High Temperature Instant Adhesive HT700-20 & HT700-454)  
**MANUFACTURER:** 3M  
**DIVISION:** Industrial Adhesives and Tapes Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 05/06/11  
**Supersedes Date:** 02/12/10

**Document Group:** 22-7861-2

#### Product Use:

**Intended Use:** Structural Strength Instant Adhesive  
**Specific Use:** Cyanoacrylate Adhesive

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
Ethyl Cyanoacrylate	7085-85-0	85 - 95
Acrylic Polymer - N.J.T.S. Reg No. 56705700001-5863P	Trade Secret	3 - 7
Acrylic Polymer - N.J.T.S. Reg No. 56705700001-6604	Trade Secret	1 - 5
Tetrahydrophthalic Anhydride	85-43-8	0.5 - 1.5

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Clear liquid, with a sharp, pungent odor.

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Combustible liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Hazardous polymerization may occur. May cause severe eye irritation. May cause allergic skin reaction. May cause allergic respiratory reaction. May bond tissue rapidly.

### 3.2 POTENTIAL HEALTH EFFECTS

#### **Eye Contact:**

Bonds eyelids rapidly.

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Vapors released during curing may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### **Skin Contact:**

Bonds skin rapidly.

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention. DO NOT force eyelids open.

**Skin Contact:** FOR SKIN BONDS: Quickly soak in warm water and avoid use of excessive force to free bonded area. If unable to free bonded area, or if lips or mouth are bonded, get medical attention. If irritation persists, get medical attention.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

## 5.1 FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point	176 °F [Test Method: Closed Cup]
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
OSHA Flammability Classification:	Class IIIA Combustible Liquid

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Combustible liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

### 6.2. Environmental precautions

Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep

away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid breathing of vapors, mists or spray. Avoid skin contact. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. Avoid contact with oxidizing agents.

## 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### 8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Safety Glasses with side shields  
Indirect Vented Goggles

### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Fluoroelastomer

Nitrile Rubber

Polyethylene

. DO NOT wear cotton gloves.

### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and N95 particulate prefilters

. Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
Ethyl Cyanoacrylate	ACGIH	TWA	0.2 ppm	

### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Odor, Color, Grade:</b>	Clear liquid, with a sharp, pungent odor.
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	176 °F [ <i>Test Method:</i> Closed Cup]
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Boiling Point</b>	131 °F [ <i>Details:</i> CONDITIONS: @ 2mm Hg]
<b>Density</b>	1.05 g/ml
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	<=0.5 mmHg [@ 75 °F]
<b>Specific Gravity</b>	1.05 [ <i>Ref Std:</i> WATER=1]
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Solubility in Water</b>	Nil
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Evaporation rate</b>	Negligible
<b>Hazardous Air Pollutants</b>	< 0.15 % weight [ <i>Test Method:</i> Calculated]
<b>Volatile Organic Compounds</b>	<=105 g/l [ <i>Test Method:</i> tested per EPA method 24] [ <i>Details:</i> EU VOC content]
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	85 - 95 % weight [ <i>Test Method:</i> Estimated]
<b>VOC Less H2O &amp; Exempt Solvents</b>	<=105 g/l [ <i>Test Method:</i> tested per EPA method 24]
<b>Viscosity</b>	600 - 800 centipoise [@ 73.4 °F]

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Heat

#### 10.2 Materials to avoid

Strong oxidizing agents

Water

Strong bases

Amines

Alcohols

**Hazardous Polymerization:** Hazardous polymerization may occur. Material polymerizes rapidly by contact with water, alcohol, amines and alkalis.

### Hazardous Decomposition or By-Products

**Substance**

Carbon monoxide  
Carbon dioxide  
Oxides of Nitrogen

**Condition**

During Combustion  
During Combustion  
During Combustion

**SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION**

Not determined.

**CHEMICAL FATE INFORMATION**

Not determined.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Cure (harden, set, or react) the product according to product instructions. Dispose of completely cured (or polymerized) wastes in a sanitary landfill. As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

**SECTION 14: TRANSPORT INFORMATION**

**ID Number(s):**

62-6127-0356-1, 62-6127-0359-5, 62-6127-3850-0

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and **not the packaging, labeling, or marking requirements**. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

**SECTION 15: REGULATORY INFORMATION**

## US FEDERAL REGULATIONS

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - Yes Immediate Hazard - Yes Delayed Hazard - Yes

## STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

**This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

**Health: 2 Flammability: 2 Reactivity: 1 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### Revision Changes:

Section 16: Disclaimer (second paragraph) was modified.

Section 8: Eye/face protection information was modified.

Section 8: Skin protection - recommended gloves information was modified.

Section 8: Respiratory protection - recommended respirators information was modified.

Section 14: Transportation legal text was modified.

Section 15: Inventories information was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 9: Property description for optional properties was modified.

Section 8: Respiratory protection - recommended respirators guide was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 10: Materials to avoid physical property was modified.

Section 10: Conditions to avoid physical property was modified.

Section 6: 6.2. Environmental precautions heading was added.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.

Section 16: Web address was added.

Section 1: Address was added.

Copyright was added.

Company logo was added.  
Section 6: Clean-up methods heading was added.  
Telephone header was added.  
Company Telephone was added.  
Section 1: Emergency phone information was added.  
Section 1: Emergency phone information was deleted.  
Company Logo was deleted.  
Copyright was deleted.  
Section 16: Web address heading was deleted.  
Section 6: Release measures heading was deleted.  
Section 1: Address line 1 was deleted.  
Section 1: Address line 2 was deleted.

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## Transport Information Document

**Date:** March 01, 2012

**3M ID Number:** 62-6127-3850-0

**Product Description:** 3M(TM) Scotch-Weld(TM) High Temperature Instant Adhesive HT700, 1 lb Bottle, 1 per case

**Transport Protective Service:** PROTECTIVE SERVICE NOT REQUIRED

**NMFC Item:** 004620

**NMFC Sub:** 05

**NMFC Class:** 085.0

**Flash Point (Closed-cup):** 176°F/80°C

### UNITED STATES DEPARTMENT OF TRANSPORTATION - GROUND (U.S. DOT, 49 CFR)

NOT REGULATED

### UNITED STATES DEPARTMENT OF TRANSPORTATION - VESSEL (U.S. DOT, 49 CFR)

NOT REGULATED

### INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

NOT REGULATED

### INTERNATIONAL MARITIME ORGANIZATION (IMO)

NOT REGULATED

The classification is authorized by the Competent Authority of the United States of America and may not meet the requirements of other competent authorities.

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